

ABSTRACT

The present invention provides methods for suppressing tumor proliferation comprising the step of inhibiting the expression of PDGF-A or the binding between PDGF-A homodimers and PDGFR α . Activation of the PDGFR α -p70S6K signal transduction pathway by PDGF-AA is an important factor in tumor angiogenesis and relates to the prognosis of patients suffering from tumors. By inhibiting PDGF-A expression in tumors or in their surrounding tissues, or by inhibiting the binding between PDGF-A homodimers and PDGFR α , the formation and retention of tumor vasculature can be inhibited, thereby suppressing tumor proliferation.